VOLUME 130, NUMBERS 1–2

(Published 19 March 2004)

CONTENTS

D. Claves, J. Giraudet, M.C. Schouler, P. Gadelle and A. Hamwi	1	Intercalation of WF_6 in the interlayer space of multiwall carbon nanotubes—structural and morphological aspects
A. Higashiya, A. Shigemoto, S. Kasai, S. Imada, S. Suga, M. Sing, C. Kim, M. Yabashi, K. Tamasaku and T. Ishikawa	7	Resonant inelastic X-ray scattering (RIXS) of $SrCuO_2$
R. Asgari, B. Davoudi and B. Tanatar	13	Effective mass enhancement in two-dimensional electron systems: the role of interaction and disorder effects
C.-L. Huang, B.-H. Chen and L. Wu	19	Variability of impurity doping in the modified $Pb(Zr,Ti)O_3$ ceramics of type ABO_3
P.P. Chen, H. Makino and T. Yao	25	InMnN: a nitride-based diluted magnetic semiconductor
P.N. Lisboa-Filho, A.W. Mombrú, H. Pardo, E.R. Leite and W.A Ortiz	31	Extrinsic properties of colossal magnetoresistive samples
M. Zhao and Q. Jiang	37	Melting and surface melting of low-dimensional In crystals
C.H. Lee and C.E. Lee	41	Spin–lattice relaxation in a dense paramagnet $CuF_2{\cdot}2H_2O$
J.K. Jung, K.-S. Ryu, Y.-I. Kim and C. Tang	45	NMR study of boron nitride nanotubes
T.Y. Lin, W.S. Su, W.S. Su and Y.F. Chen	49	Investigation of surface properties of Si-doped GaN films by electric force microscopy and photoluminescence
J. Peng, J. Chen, H. Luo, T. He, H. Xu and D. Lin	53	Shear-mode piezoelectric properties of $0.69Pb(Mg_{1/3}Nb_{2/3})O_3$-$0.31PbTiO_3$ single crystals
H. Kawamura, M. Harada, Y. Akahama and K. Takemura	59	Hydrogen ordering in rhenium hydride: anti-CdI_2 type structure of $ReH_{0.36}$
T. Makino, R. André, J.-M. Gérard, R. Romestain, L.S. Dang, M. Bartels, K. Lischka and D. Schikora	63	Time domain investigation on excitonic spectral diffusion in CdSe quantum dots grown on vicinal surface GaAs substrates
X. Zhang, Z. Liu, Y. Liu and F. Wu	67	Defect states in 2D acoustic band-gap materials with bend-shaped linear defects
H. Maekawa, Y. Ukei, K. Morota, N. Kashii, J. Kawamura and T. Yamamura	73	High temperature proton NMR study of yttrium doped barium cerates
X. Li, T. Kobayashi and T. Sekine	79	Stability of TiN and fast synthesis of rutile from TiN and CuO by shock compression
M. Nishida	83	Surfacelike band-edge states on H-covered and oxidized ultrasmall Si quantum boxes: a theoretical study
J.X. Wang, D.F. Liu, X.Q. Yan, H.J. Yuan, L.J. Ci, Z.P. Zhou, Y. Gao, L. Song, L.F. Liu, W.Y. Zhou, G. Wang and S.S. Xie	89	Growth of SnO_2 nanowires with uniform branched structures
R.B. Almeida, A.N. Borges, P.C.M. Machado, J.R. Leite and F.A.P. Osório	95	Polaronic effects on the intra-donor $1s \rightarrow 2p^{\pm}$ transition energies in GaN structures
S. Kervan, A. Kılıç, Ş. Özcan and A. Gencer	101	Magnetic phase transitions in $LaMn_{2-x}Fe_xSi_2$ silicides
X.G. Zheng and E.S. Otabe	107	Antiferromagnetic transition in atacamite $Cu_2Cl(OH)_3$
S.F. Hu, W.C. Weng and Y.M. Wan	111	Fabrication of silicon nanowire structures based on proximity effects of electron-beam lithography
A. Wensauer, M. Korkusiński and P. Hawrylak	115	Configuration interaction method for Fock–Darwin states
S. Ben Bouzid, F. Bousbih, R. Chtourou and E. Tounié	121	Band gap energy, nitrogen localized states and GaN-like phonon in heavily doped GaAsN grown by molecular beam epitaxy
Z.-G. Yan, Y.-W. Zhang, L.-P. You, R. Si and C.-H. Yan	125	Controlled synthesis and characterization of monazite type monocrystalline nanowires of mixed lanthanide orthophosphates

A. Gordon, N. Logoboy and W. Joss	131	Magnon softening in metals at quantizing magnetic fields
W. Grochala, A. Porch and P.P. Edwards	137	Meissner–Ochsenfeld superconducting anomalies in the Be–Ag–F system
B. Dalela, R.K. Singhal, S. Dalela, N.L. Saini, C.T. Chen and K.B. Garg	143	Temperature dependent study of itinerant holes in $Bi_2Sr_2Ca_1Cu_2O_{8-\delta}$
A.S. Santos, L. Ioriatti and J.J. De Groote	149	Erratum to ''Oscillator strength of a two-dimensional D^- ion in magnetic fields'' [Solid State Communications, 129 (2004) 325–330]
	I	Keywords
	III	Instructions to Authors

VOLUME 130, NUMBERS 3–4

(Published 7 April 2004)

CONTENTS

X.N. Lin, V.A. Bondarenko, G. Cao and J.W. Brill	151	Specific heat of $Sr_4Ru_3O_{10}$
A.J. Peter and K. Navaneethakrishnan	155	The effect of hydrostatic pressure on metal–insulator transition in quantum well semiconductor systems
G.A. Torchia, O. Martinez-Matos, N.M. Khaidukov and J.O. Tocho	159	Phonon coupling of Cr^{3+} ions in Cs_2NaAlF_6 crystals
J.J. Quinn, A. Wojs and K.-S. Yi	165	Residual interactions and correlations among Laughlin quasi-particles: novel hierarchy states
T. Oku, A. Nishiwaki and I. Narita	171	Formation and structure of $B_{28}N_{28}$ clusters studied by mass spectrometry and molecular orbital calculation
V.V. Ivanovskaya and G. Seifert	175	Tubular structures of titanium disulfide TiS_2
X.Y. Huang, Z. Xu and L.D. Chen	181	The thermoelectric performance of $ZrNiSn/ZrO_2$ composites
K. Kärkkäinen, M. Koskinen, M. Manninen and S.M. Reimann	187	Electron–hole bilayer quantum dots: phase diagram and exciton localization
B. Teng and H.K. Sy	193	Spin correlations in the Ising chains
M.-G. Kwak, J.-H. Park and S.H. Shon	199	Synthesis and properties of luminescent Y_2O_3:Eu (15–25 wt%) nanocrystals
V. Panchal, N. Garg, A.K. Chauhan, Sangeeta and S.M. Sharma	203	High pressure phase transitions in $BaWO_4$
C. Mitterbauer, C. Hébert, G. Kothleitner, F. Hofer, P. Schattschneider and H.W. Zandbergen	209	Electron energy loss-near edge structure as a fingerprint for identifying chromium nitrides
B. Jäger, P. Herzig, W. Wolf, B. Nowak and O.J. Żogał	215	Electronic structure and ^{89}Y spin-lattice relaxation for YH_2
T. Palasyuk and M. Tkacz	219	Pressure induced hexagonal to cubic phase transformation in erbium trihydride
T. Volk, D. Isakov, V. Salobutin, L. Ivleva, P. Lykov, V. Ramzaev and M. Wöhlecke	223	Effects of Ni doping on properties of strontium–barium–niobate crystals
L. Zhu, X. Chen and S. Yamanaka	227	Preparation and properties of the ternary nitride ZrNF
L. Chen, Y. Gu, L. Shi, Z. Yang, J. Ma and Y. Qian	231	A reduction–boronation route to nanocrystalline titanium diboride
S.-T. Zhang, H.-W. Cheng, Y.-F. Chen, C.-H. Song, J. Wang, Y.-D. Xia, X.-N. Zhao, Z.-G. Liu and N.-B. Ming	235	Composition-dependent structures and properties of $Bi_4Ti_{3-x}Zr_xO_{12}$ thin films
R. Lv, C. Cao, H. Zhai, D. Wang, S. Liu and H. Zhu	241	Growth and characterization of single-crystal ZnSe nanorods via surfactant soft-template method
S.J. Stewart, M. Multigner, J.F. Marco, F.J. Berry, A. Hernando and J.M. González	247	Thermal dependence of the magnetization of antiferromagnetic copper(II) oxide nanoparticles

A.C.R. Bittencourt, J.F. Estanislau and G.E. Marques	253	Spin-polarized charge fluctuations in magnetic tunneling diodes
W. Chen, L. Feng and B. Qu	259	In situ synthesis of poly(methyl methacrylate)/MgAl layered double hydroxide nanocomposite with high transparency and enhanced thermal properties
J.W. Jang, C.E. Lee, D.W. Lee and J.-I. Jin	265	Transient electroluminescence study of mobility balancing in organic light-emitting diodes based on poly(*p*-phenyleneviny-lene) derivatives
Y. Matsuo, J. Hatori, Y. Nakashima and S. Ikehata	269	Superprotonic and ferroelastic phase transition in $K_3H(SO_4)_2$
Y. Dong, J. Chen, X. Wang, M. Chen and X. Wang	275	Optimized implant dose and energy to fabricate high-quality patterned SIMOX SOI materials
S.-J. Chen, X.-T. Chen, Z. Yu, J.-M. Hong, Z. Xue and X.-Z. You	281	Preparation and characterization of fine Sr_2CeO_4 blue phosphor powders
S.-J. Kwon and D.-Y. Jung	287	A novel hybrid of high-T_c cuprate and paramagnetic organic radical
A. Wang, Y. Liu, Z. Zhang, Y. Long and G. Cao	293	Magnetic entropy change and colossal magnetoresistance effect in the layered perovskite $La_{1.34}Sr_{1.66}Mn_2O_7$
	I	Author Index
	V	Keywords
	VII	Instructions to Authors

VOLUME 130, NUMBER 5

(Published 16 April 2004)

CONTENTS

Y. Ni, M. Shao, Z. Wu, F. Gao and X. Wei	297	The effect of KI on the formation of Tl_2E (E = S, Se) nanorods via solvothermal route
Z.H. Dong	301	Phase diagram of an anisotropic $J_1 - J_2 - J_3$ model of a spin-$\frac{1}{2}$ square-lattice antiferromagnet
D.S. Joag, D.J. Late and U.D. Lanke	305	Field emission from a-GaN films deposited on Si (100)
L. Gao, E. Wang, S. Lian, Z. Kang, Y. Lan and D. Wu	309	Microemulsion-directed synthesis of different CuS nanocrystals
Y.-J. Ma, F. Zhou, L. Lu and Z. Zhang	313	Low-temperature transport properties of individual SnO_2 nanowires
D. Mendoza, F. Morales and R. Escudero	317	Conductance of bulk samples of multiwall carbon nanotubes–metal junctions
A.S. Ferreira, M.A. Continentino and E.C. Marino	321	Quantum effects on the competition between antiferromagnet-ism and superconductivity in heavy-fermion systems
K. Ishioka, M. Hase and M. Kitajima	327	In situ observation of the ultrafast lattice dynamics of graphite under ion irradiation
S. Kumar and C. Godet	331	Electronic transport in amorphous carbon nitride (a-CN_x:H) and carbon oxide (a-CO_x:H) films
S. Saito, K. Umemoto, S.G. Louie and M.L. Cohen	335	Energetics and structural stability of Cs_3C_{60}
Y.V. Sushko, B. DeHarak, G. Cao, G. Shaw, D.K. Powell and J.W. Brill	341	Hydrostatic pressure effects on the magnetic susceptibility of ruthenium oxide $Sr_3Ru_2O_7$: evidence for pressure-enhanced antiferromagnetic instability
Z. Yang, Y. Gu, L. Chen, L. Shi, J. Ma and Y. Qian	347	Preparation of Mn_5Si_3 nanocages and nanotubes by molten salt flux
M.U. Islam, T. Abbas, S.B. Niazi, Z. Ahmad, S. Sabeen and M.A. Chaudhry	353	Electrical behaviour of fine particle, co-precipitation prepared Ni–Zn ferrites

İ. Avci, M. Tepe and D. Abukay — 357 — Effect of deposition conditions on $YBa_2Cu_3O_{7-\delta}$ thin films by inverted cylindrical magnetron sputtering and substrate effects

J. Zhu, X.-y. Mao and X.-b. Chen — 363 — Properties of vanadium-doped $SrBi_4Ti_4O_{15}$ ferroelectric ceramics

I — Keywords

III — Instructions to Authors

VOLUME 130, NUMBER 6

(Published 23 April 2004)

CONTENTS

R.P. Jia, Y. Shen, H.Q. Luo, X.G. Chen, Z.D. Hu and D.S. Xue — 367 — Enhanced photoluminescence properties of morin and trypsin absorbed on porous alumina films with ordered pores array

X.-G. Tang, J. Wang, X.-X. Wang and H.L.-W. Chan — 373 — Electrical properties of highly (111)-oriented lead zirconate thin films

A.E. Kovalev, S.A. Zvyagin, C.R. Bowers, J.L. Reno and J.A. Simmons — 379 — Observation of a node in the quantum oscillations induced by microwave radiation

V.G. Baonza — 383 — General behavior of longitudinal optical phonons in cubic diatomic crystals

L.A. Baum, A.E. Goeta, R.C. Mercader and A.L. Thompson — 387 — Magnetic dimensionality of $Y_{(2-x)}Dy_xBaCuO_5$

Y. Seo, B. Eom, I. Yu, K. Park and S. Lee — 391 — Edge current switch of two-dimensional electron gas using carrier density control

T.-B. Hur, I.J. Lee, H.L. Park, Y.-H. Hwang and H.-K. Kim — 397 — Structural relation and epitaxial properties of hexagonal InN and oxidized cubic In_2O_3

R. Shen, W. Xu, D. Zhang and D. Zhu — 401 — New conducting thin films derived from $M(dimt)_2$ salts (M = Ni(II), Pd(II)) by using poly counter cations

C.-H. Kim — 405 — Hole-interface optical phonon relaxation rates with valence band-mixing effects

Y. Matsuo, K. Saito, H. Kawashima and S. Ikehata — 411 — Novel solid acid fuel cell based on a superprotonic conductor $Tl_3H(SO_4)_2$

M. Itoi, A. Taira, M. Enomoto, N. Matsushita, N. Kojima, Y. Kobayashi, K. Asai, K. Koyama, T. Nakano, Y. Uwatoko and J. Yamaura — 415 — Crystal structure and structural transition caused by charge-transfer phase transition for iron mixed-valence complex $(n\text{-}C_3H_7)_4N[Fe^{II}Fe^{III}(dto)_3]$ (dto = $C_2O_2S_2$)

J.S. Song, H.L. Park and T.W. Kim — 421 — Dependence of the interband transition and the activation energy on the ZnTe spacer thickness in CdTe/ZnTe double quantum dots

Z. Minglong, X. Yiben, W. Linjun and S. Hujiang — 425 — Response of chemical vapor deposition diamond detectors to X-ray

X.Y. Yuan, G.S. Wu, T. Xie, Y. Lin, G.W. Meng and L.D. Zhang — 429 — Autocatalytic redox fabrication and magnetic studies of Co–Ni–P alloy nanowire arrays

Q. Ren, B. Zhang, J. Xu, Z.S. Zhang, Y.B. Jin, Y. Qian and D.P. Yu — 433 — Etched facet and semiconductor/air DBR facet of a AlGaInP laser diode prepared by focused ion beam milling

I — Keywords

III — Instructions to Authors

VOLUME 130, NUMBER 7

(Published 30 April 2004)

CONTENTS

J.W. Brill — 437 — Soliton analysis of the electro-optical response of blue bronze

X.N. Ying, J. He and Y.N. Wang — 441 — A low temperature internal friction study of $Y_{0.85}Ca_{0.15}Ba_2Cu_3O_{7-\delta}$ with different oxygen content

J.M. Schneider, Z. Sun, R. Mertens, F. Uestel and R. Ahuja	445	Ab initio calculations and experimental determination of the structure of Cr_2AlC
P. Xu, T.-Y. Cai and Z.-Y. Li	451	Studies on magnetic photonic band-gap material at microwave frequency
A. Elmali and Y. Elerman	455	The magnetic behavior of $La_{1-x}Tb_xMn_2Si_2$ ($0 \leq x \leq 0.3$) in weak magnetic fields
X.F. Wang, S.X. Gu, J.G. Yu, X.J. Zhao and H.Z. Tao	459	Structural investigations of GeS_2–Ga_2S_3–CdS chalcogenide glasses using Raman spectroscopy
H.Y. Xu, H. Wang, Y.Q. Meng and H. Yan	465	Rapid synthesis of size-controllable YVO_4 nanoparticles by microwave irradiation
R.Z. Hou and X.M. Chen	469	La^{3+} substitution in four-layers Aurivillius phase $SrBi_4Ti_4O_{15}$
M.D. Kim, D.H. Lee, T.W. Kim and S.G. Kim	473	Formation process for and strain effect in InAs quantum dots grown on GaAs substrates by using molecular beam epitaxy
F. Comas, N. Studart and G.E. Marques	477	Optical phonons in semiconductor quantum rods
A.R. Lim, W.K. Jung and T.J. Han	481	A study of molecular motion and Raman processes in $K_3H(SO_4)_2$ and $KHSO_4$ single crystals by observation of ^1H and ^{39}K spin–lattice relaxation
Y.-H. Yoo, W. Lee and H. Shin	487	Effect of barrier thickness on strain uniformity of wire in laterally aligned InGaAs/GaAs quantum wire nanostructures
Y.N. Chen and D.S. Chuu	491	Superradiant and Aharonov-Bohm effect for the quantum ring exciton
A. Yasui, T. Uozumi and Y. Kayanuma	495	Quantum dynamics of phonon assisted emission of carriers at deep level centers
C. Ouyang, S. Shi, Z. Wang, X. Huang and L. Chen	501	Experimental and theoretical studies on dynamic properties of Li ions in $Li_xMn_2O_4$
	I	Keywords
	III	Instructions to Authors

VOLUME 130, NUMBER 8

(Published 7 May 2004)

CONTENTS

H. Iwasaki, M. Koyano, Y. Yamamura and H. Hori	507	Non-equilibrium and non-linear stationary states in thermoelectric materials
Z. Yang, S. Tan and Y. Zhang	511	Magnetic anisotropy in colossal magnetoresistive $FeCr_2S_4$ single crystals
H.J. Fan, R. Scholz, F.M. Kolb, M. Zacharias and U. Gösele	517	Growth mechanism and characterization of zinc oxide microcages
E. Elangovan, K. Ramesh and K. Ramamurthi	523	Studies on the structural and electrical properties of spray deposited SnO_2:Sb thin films as a function of substrate temperature
X. Xu, Z. Zhao, J. Xu and P. Deng	529	Thermal diffusivity, conductivity and expansion of $Yb_{3x}Y_{3(1-x)}Al_5O_{12}$ ($x = 0.05$, 0.1 and 0.25) single crystals
J.-H. Park, B.-C. Choi and J.-B. Kim	533	Electrical properties of $KTiOPO_4$ single crystal in the temperature range from $-100\,^{\circ}C$ to $100\,^{\circ}C$
L. Chen, Y. Gu, L. Shi, Z. Yang, J. Ma and Y. Qian	537	A room-temperature approach to boron nitride hollow spheres
G.B. Ji, W. Chen, S.L. Tang, B.X. Gu, Z. Li and Y.W. Du	541	Fabrication and magnetic properties of ordered 20 nm Co–Pb nanowire arrays
V.L.J. Joly, S.K. Date and P.A. Joy	547	Metastable ferromagnetic phases with predictable T_cs in $La_2MnCo_{1-x}Ni_xO_6$
Z. Minglong, X. Yiben, W. Linjun, S. Hujiang and G. Beibei	551	Performance of CVD diamond alpha particle detectors

Z. Feng, T. He, H. Xu, H. Luo and Z. Yin — 557 — High electric-field-induced strain of $Pb(Mg_{1/3}Nb_{2/3})O_3$–$PbTiO_3$ crystals in multilayer actuators

Z.Q. Li, X.H. Zhang, H. Liu, X.J. Liu, X.D. Liu, W.B. Mi, H.L. Bai, X.N. Jing and E.Y. Jiang — 563 — Magnetic properties of the charge ordered $Nd_{0.75}Na_{0.25}MnO_3$

F. Parvin, A.K.M.A. Islam and F.N. Islam — 567 — AuB_2 in comparison to superconducting MgB_2-an ab initio study

I — Author index

V — Keywords

VII — Instructions to Authors

VOLUME 130, NUMBER 9

(Published 14 May 2004)

CONTENTS

E.M. Malone, S.C. Petitto and M.A. Langell — 571 — Fuchs–Kliewer phonon spectrum of $Co_3O_4(110)$ single crystal surfaces by high resolution electron energy loss spectroscopy

Y.L. Du, G. Chen and M.S. Zhang — 577 — Investigation of structural phase transition in polycrystalline $SrTiO_3$ thin films by Raman spectroscopy

Q. Jiang, S.H. Zhang and J.C. Li — 581 — Grain size-dependent diffusion activation energy in nanomaterials

Z. Wang, X. Chen, J. Liu, M. Mo, L. Yang and Y. Qian — 585 — Room temperature synthesis of Cu_2O nanocubes and nanoboxes

Z. Feng, X. Zhao and H. Luo — 591 — Bias field effects on the dielectric properties of $0.67Pb(Mg_{1/3}Nb_{2/3})O_3$–$0.33PbTiO_3$ single crystals with different orientations

M.S. Seehra, P. Roy, A. Raman and A. Manivannan — 597 — Structural investigations of synthetic ferrihydrite nanoparticles doped with Si

W.H. Zhong, C.Q. Sun and S. Li — 603 — Size effect on the magnetism of nanocrystalline Ni films at ambient temperature

Q.S. Wang, Z.D. Xu, Q.L. Nie, L.H. Yue, W.X. Chen and Y.F. Zheng — 607 — Hydrothermal preparation and characterization of $Cd_{0.9}Mn_{0.1}S$ nanorods

E. Knoesel, G.J. Guyon, K.F. McDonald, S.E. Lofland, K.V. Ramanujachary and W.H. McCarroll — 613 — Optical reflectance of blue bronze crystals near the Peierls transition

J. Li, Y. Xu, D. Wu and Y. Sun — 619 — Hydrothermal synthesis of novel sandwich-like structured ZnS/octylamine hybrid nanosheets

N. Stojilovic and R.D. Ramsier — 623 — High-temperature desorption of benzene from zirconium surfaces

I.T. Yoon, T.W. Kang, K.H. Kim and D.J. Kim — 627 — A Hall coefficient investigation of ferromagnetic $Ga_{1-x}Mn_xAs$ layers on (100) GaAs substrates

A. Venimadhav, M.E. Vickers and M.G. Blamire — 631 — Ferromagnetic spin ordering in disordered Sr_2FeMoO_6 films

M. Yamazaki and K. Kojima — 637 — Long-lasting afterglow in Tb^{3+}-doped SiO_2–Ga_2O_3–CaO–Na_2O glasses and its sensitization by Yb^{3+}

I — Keywords

III — Instructions to Authors

VOLUME 130, NUMBER 10

(Published 21 May 2004)

CONTENTS

X. Chen, W. Lu and S.C. Shen — 641 — First-principles study of photoconductivity in $BaTiO_3$ with oxygen vacancies

C. Ghezzi, R. Magnanini and A. Parisini	647	Magneto-oscillations of the Hall coefficient in n-type GaSb at the extreme quantum limit
H. Jin, L.-G. Zhang, Z.-H. Zheng, X.-G. Kong and D.-Z. Shen	653	Exciton tunnelling in ZnCdSe quantum well/CdSe quantum dots
Z.M. Li, V.N. Popov and Z.K. Tang	657	A symmetry-adapted force-constant lattice-dynamical model for single-walled carbon nanotubes
N.-Y. Cui	663	Universal explicit expression for quantum Hall conductance at any temperatures and chemical potentials
A.D. Alexeev, T.A. Vasylenko and E.V. Ul'yanova	669	Phase states of methane in fossil coals
S. Bals, B. Kabius, M. Haider, V. Radmilovic and C. Kisielowski	675	Annular dark field imaging in a TEM
C.L. Zhu, C.N. Chen, L.Y. Hao, Y. Hu and Z.Y. Chen	681	In-situ preparation of 1D CuO nanostructures using $Cu_2(OH)_2CO_3$ nanoribbons as precursor for sacrifice-template via heat-treatment
G. Liu, J. Chen, Y. Cui, Z. Liu, M. Zhang, G. Wu, E. Brück, F.R. de Boer, F. Meng, Y. Li and J. Qu	687	Characterization of preferential orientation of martensitic variants in a single crystal of NiMnGa
V.L.J. Joly and P.A. Joy	691	Observation of higher magnetization on the substitution of Al for Co in La_2MnCoO_6
X.X. Wang, K.H. Lam, X.G. Tang and H.L.W. Chan	695	Dielectric characteristics and polarization response of lead-free ferroelectric $(Bi_{0.5}Na_{0.5})_{0.94}Ba_{0.06}TiO_3$–P(VDF-TrFE) 0–3 composites
C.-D. Kim, K.-W. Jang and Y.-I. Lee	701	Optical properties of Tm-doped GaSe single crystals
L.A. Ponomarenko, D.T.N. de Lang, A. de Visser, V.A. Kulbachinskii, G.B. Galiev, H. Künzel and A.M.M. Pruisken	705	The effect of carrier density gradients on magnetotransport data measured in Hall bar geometry
	I	Keywords
	III	Instructions to Authors

VOLUME 130, NUMBER 11

(Published 28 May 2004)

CONTENTS

B. Chevalier and B. Malaman	711	Reinvestigation of the electrical and magnetic properties of the ternary germanide CeCoGe
M.S. Kushwaha and H. Sakaki	717	Minigap plasmons in a two-dimensional electron gas subjected to a one-dimensional periodic potential
A.S. Kaminskii	723	Orientation kinetics of the hexavacancies—V_6 (B_{80}^4) in silicon
S.P. Gabuda, S.G. Kozlova and N.S. Dalal	729	Vibronic model for antiferroelectric phase transition in squaric acid, $H_2C_4O_4$
M. Chen, Z.L. Liu, Y. Wang, C.C. Wang, X.S. Yang and K.L. Yao	735	Ferroelectric properties of Pr_6O_{11}-doped $Bi_4Ti_3O_{12}$
K.L. Yao, L.Q. Wang and Z.L. Liu	741	The first principle study on the electronic structure and spin ordering of the rare earth palladium sulfide, $EuPd_3S_4$
Z. Hou, F. Wu and Y. Liu	745	Phononic crystals containing piezoelectric material
D.-P. Nguyen, N. Regnault, R. Ferreira and G. Bastard	751	Alloy effects in $Ga_{1-x}In_xN$/GaN heterostructures
N.V. Skorodumova and S.I. Simak	755	Stabilization of monoatomic gold wires by carbon impurities
A.S. Carriço and N.S. Almeida	759	Influence of transverse fields on surface and bulk polaritons in antiferromagnetic films
D. Korošak and B. Cvikl	765	On possible spin injection at non-ideal Schottky contacts

L. Yang, X. Zhang, R. Huang, G. Zhang and X. An 769 Synthesis of single crystalline GaN nanoribbons on sapphire (0001) substrates

R.S. Daries Bella and K. Navaneethakrishnan 773 Donor binding energies and spin–orbit coupling in a spherical quantum dot

I Keywords

III Instructions to Authors

VOLUME 130, NUMBER 12

(Published 4 June 2004)

CONTENTS

M. Oualla, M. Elaatmani, M. Daoud, D. Mezzane, I. Luk'yanchuk and A. Zegzouti 777 Study of new rare earth family $Pb_{1.6}K_{1.2}R_{0.2}Nb_5O_{15}$ (R = La, Nd, Sm, Eu and Gd) of tetragonal tungsten bronze-type ferroelectrics

G.F. Goya 783 Handling the particle size and distribution of Fe_3O_4 nanoparticles through ball milling

R. Chu, J. Yan, S. Lian, Y. Wang, F. Yan and D. Chen 789 Shape-controlled synthesis of nanocrystalline titania at low temperature

S.E. Kulkova, S.V. Eremeev and S.S. Kulkov 793 Electronic structure and magnetic properties of Co- and Mn-based Heusler alloys and thin films

Q. Zhang, L. Kong, Q. Zhang, W. Wang and Z. Hua 799 The effect of heat treatment on bistable Ag-TCNQ thin films

V.A. Ryzhov, A.V. Lazuta, V.P. Khavronin, I.I. Larionov, I.O. Troaynchuk and D.D. Khalyavin 803 Linear and nonlinear critical magnetic properties and transport in $Nd_{0.75}Ba_{0.25}MnO_3$ single crystal: evidence for its anomalous critical behavior near T_C

A.S. Berdinsky, D. Fink, J.B. Yoo, L.T. Chadderton, H.G. Chun, J.H. Han and V.P. Dragunov 809 Electronic conduction properties of Au/C_{60}/p-Si and C_{60}/Au/p-Si sandwich structures: I–V and transducer characteristics

C.-Y. Wang, V. Paul-Boncour, C.-C. Kang, R.-S. Liu, S.M. Filipek, M. Dorogova, I. Marchuk, T. Hirata, A. Percheron-Guegan, H.-S. Sheu, L.-Y. Jang, J.-M. Chen and H.-D. Yang 815 The novel YMn_2D_6 deuteride synthesized under high pressure of gaseous deuterium

H.H. Cho, W.H. Lee and Y.Y. Chen 821 Antiferromagnetism and the Kondo behaviour in $Ce(Pt_{1-x}Pd_x)Ga$

III Volume 130 Index

XI Author Index

XVII Keywords

XIX Instructions to Authors